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## Amendments to the claims:

The following listing of claims will replace all prior versions, and listings, of claims in this application.

## Listing of claims:

- 1. 19. (cancelled)
- 20. (currently amended) A method for increasing apoptosis in a cell tumor cells selected from the group consisting of [[a]] leukemic cell cells, [[a]] prostate cancer cell cells, [[a]] pancreatic cancer cell cells, [[a]] head and neck squamous carcinoma cell cells, [[a]] breast carcinoma cell cells, [[a]] myeloid leukemic cell cells, and [[a]] colon carcinoma cell cells, which method comprises contacting the cell tumor cells with
  - (a) an effective amount of paclitaxel, and
  - (b) an effective amount of  $C_6$ -ceramide, sequentially or concomitantly,

thereby increasing apoptosis in the tumor cells, wherein the amount of (a) and (b) is effective to induce a 50% death rate of the tumor cells, and wherein the resulting apoptosis is greater than the apoptosis caused by contacting the cell tumor cells with either paclitaxel alone or  $C_6$ -ceramide alone, thereby increasing apoptosis in the cell.

21. (currently amended) The method of claim 20, wherein the  $\frac{1}{1}$  eell is  $\frac{1}{1}$  tumor cells are first contacted with paclitaxel and subsequently contacted with  $\frac{1}{1}$  corramide.

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22. (currently amended) The method of claim 20, wherein the cell is tumor cells are present in a subject.

- 23. (currently amended) The method of claim 20, wherein the contacting with paclitaxel is effected by CREMOPHOR cremophore-mediated delivery or liposome-mediated delivery, and the contacting with C6-ceramide is effected by CREMOPHOR cremophore-mediated delivery, alcoholmediated delivery or liposome-mediated delivery.
- 24. (previously presented) The method of claim 22, wherein the contacting with paclitaxel and with C<sub>6</sub>-ceramide is effected by an administration route selected from the group consisting of intravenous, intraperitoneal, intrathecal, intralymphatic, intramuscular, intralesional, parenteral, epidural, subcutaneous, pleural, topical, oral, nasal, anal, ocular and otic.
- 25. (currently amended) A method of decreasing the size of a tumor, wherein the tumor comprises tumor cells selected from the group consisting of leukemic cells, prostate cancer cells, pancreatic cancer cells, head and neck squamous cell carcinoma cells, breast carcinoma cells, myeloid leukemic cells, and colon carcinoma cells, which method comprises contacting the tumor with
  - (a) an effective amount of paclitaxel, and
  - (b) an effective amount of  $C_6$ -ceramide, sequentially or concomitantly,

thereby decreasing the size of the tumor,

wherein the amount of (a) and (b) is effective to induce a 50% death rate of the tumor cells, and wherein the

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resulting decrease in size of the tumor is greater than the decrease in size caused by contacting the tumor with either paclitaxel alone or  $C_6$ -ceramide alone, thereby decreasing the size of the tumor.

- 26. (previously presented) The method of claim 25, wherein the tumor is first contacted with paclitaxel and subsequently contacted with  $C_6$ -ceramide.
- 27. (previously presented) The method of claim 25, wherein the tumor is present in a subject.
- 28. (currently amended) The method of claim 25, wherein the contacting with paclitaxel is effected by CREMOPHOR cremophore-mediated delivery or liposome-mediated delivery, and the contacting with C<sub>6</sub>-ceramide is effected by CREMOPHOR cremophore-mediated delivery, alcoholmediated delivery or liposome-mediated delivery.
- 29. (previously presented) The method of claim 27, wherein the contacting with paclitaxel and with C<sub>6</sub>-ceramide is effected by an administration route selected from the group consisting of intravenous, intraperitoneal, intrathecal, intralymphatic, intramuscular, intralesional, parenteral, epidural, subcutaneous, pleural, topical, oral, nasal, anal, ocular and otic.
- 30. (currently amended) A pharmaceutical composition comprising paclitaxel, C<sub>6</sub>-ceramide and a pharmaceutically acceptable carrier, wherein the composition causes apoptosis in a cell selected from the group consisting of a leukemic cell, a prostate cancer cell, a pancreatic

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cancer cell, a <u>head and neck</u> squamous carcinoma cell, a breast carcinoma cell, a myeloid leukemic cell, and a colon carcinoma cell.

- 31. (currently amended) A method for treating a subject afflicted with cancer selected from the group consisting of leukemia, prostate cancer, pancreatic cancer, head and neck squamous cell cancer, breast cancer, myeloid leukemia, and colon cancer, which method comprises administering to the subject an effective amount of paclitaxel and an effective amount of C6-ceramide, sequentially or concomitantly, wherein the amount of paclitaxel and C6-ceramide are effective to induce a 50% death rate of the cells of the cancer.
- 32. (previously presented) The method of claim 31, wherein paclitaxel is first administered and  $C_6$ -ceramide is subsequently administered to the subject.
- 33. (previously presented) The method of claim 31, wherein  $C_6$ ceramide is first administered and paclitaxel is
  subsequently administered to the subject.
- 34. (new) The method of claim 20, wherein the tumor cells are selected from the group consisting of prostate cancer cells, pancreatic cancer cells, myeloid leukemic cells and colon carcinoma cells.
- 35. (new) The method of claim 25, wherein the tumor cells are selected from the group consisting of prostate cancer cells, pancreatic cancer cells, myeloid leukemic cells and colon carcinoma cells.

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- 36. (new) The pharmaceutical composition of claim 30, wherein the cells are selected from the group consisting of prostate cancer cells, pancreatic cancer cells, myeloid leukemic cells and colon carcinoma cells.
- 37. (new) The method of claim 31, wherein the cancer is selected from the group consisting of prostate cancer, pancreatic cancer, myeloid leukemia and colon cancer
- 38. (new) The method of claim 20, wherein the tumor cells are selected from the group consisting of leukemic cells, prostate cancer cells, head and neck squamous carcinoma cells, pancreatic cancer cells, myeloid leukemic cells and colon carcinoma cells.
- 39. (new) The method of claim 25, wherein the tumor cells are selected from the group consisting of leukemic cells, prostate cancer cells, head and neck squamous carcinoma cells, pancreatic cancer cells, myeloid leukemic cells and colon carcinoma cells.
- 40. (new) The pharmaceutical composition of claim 30, wherein the cells are selected from the group consisting of leukemic cells, prostate cancer cells, head and neck squamous carcinoma cells, pancreatic cancer cells, myeloid leukemic cells and colon carcinoma cells.
- 41. (new) The method of claim 31, wherein the cancer is selected from the group consisting of leukemia, prostate cancer, pancreatic cancer, head and neck squamous cell cancer, myeloid leukemia and colon cancer.